

REMARKS

Claims 1-28 were examined and reported in the Office Action. Claims 1-28 are rejected. Claim 12 is cancelled. Claims 1, 2, 4, 6, 8, 10, 13 and 21 are amended. New claim 29 is added. Claims 1-11 and 13-29 remain.

Applicant requests reconsideration of the application in view of the following remarks.

I. 35 U.S.C. §102(b)(e)

A. It is asserted in the Office Action that claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,199,137 issued to Aguilar et al. ("Aguilar"). Applicant respectfully disagrees.

According to MPEP §2131, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.' (Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). 'The identical invention must be shown in as complete detail as is contained in the ... claim.' (Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, i.e., identity of terminology is not required. (In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990))."

Applicant's amended claim 1 contains the limitations of "[a] circuit comprising: a plurality of switches coupled to a plurality of registers, the plurality of registers to control the plurality of switches, and a universal serial bus (USB) host controller coupled to said plurality of switches, said USB host controller having a plurality of root hubs wherein the plurality of switches are dynamically switched to route pairs of a plurality of USB ports to one of said plurality of root hubs based on a USB device bandwidth balancing process to maximize USB device bandwidth."

Aguilar discloses an IO controller device and method for controlling data that includes a port router. Aguilar mentions that the invention may be applied to USB IO controllers. (Aguilar, column 2, lines 61-63). Aguilar mentions USB one more time regarding protocol rules. (Aguilar, column 5, lines 5-8). Nowhere else in Aguilar is USB mentioned. Aguilar does not teach, discuss or suggest the limitations of "said USB host controller having a plurality of root hubs wherein the plurality of switches are dynamically switched to route pairs of a plurality of USB ports to one of said plurality of root hubs based on a USB device bandwidth balancing process to maximize USB device bandwidth." That is, no teaching exists in Aguilar regarding pairing USB ports and switching the paired ports to a single USB root hub.

Therefore, since Aguilar does not disclose, teach or suggest all of Applicant's amended claim 1 limitations, Applicant respectfully asserts that a *prima facie* rejection under 35 U.S.C. § 102(b) has not been adequately set forth relative to Aguilar. Thus, Applicant's claim 1 is not anticipated by Aguilar.

Accordingly, withdrawal of the 35 U.S.C. §102(b) rejection for claim 1 is respectfully requested.

B. It is asserted in the Office Action that claims 1-28 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,256,700 issued to Sauber ("Sauber"). Applicant respectfully disagrees.

Applicant's amended claim 1 contains the limitations of "[a] circuit comprising: a plurality of switches coupled to a plurality of registers, the plurality of registers to control the plurality of switches, and a universal serial bus (USB) host controller coupled to said plurality of switches, said USB host controller having a plurality of root hubs wherein the plurality of switches are dynamically switched to route pairs of a plurality of USB ports to one of said plurality of root hubs based on a USB device bandwidth balancing process to maximize USB device bandwidth."

Applicant's claim 6 contains the limitations of "a processor; a memory coupled to the processor; north bridge coupled to a bus and the processor; a south bridge coupled

to the bus, said south bridge including a universal serial bus (USB) host controller having a plurality of root hubs; and USB bandwidth load balancing circuit coupled to said south bridge, wherein the USB bandwidth load balancing circuit dynamically distributes pairs of a plurality of USB ports each to one of said plurality of root hubs based on a USB device bandwidth balancing process to maximize USB device bandwidth."

Applicant's claim 13 contains the limitations of "determining allocation of a plurality of USB root hubs; and switching a plurality of USB root hub USB device assignments dynamically to distribute pairs of a plurality of USB ports each to one of a plurality of USB root hubs based on a USB device bandwidth balancing process to maximize USB device bandwidth."

Applicant's amended claim 21 contains the limitations of "[a] program storage device readable by a machine comprising instructions that cause the machine to: determine allocation of a plurality of USB root hubs; and switching a plurality of USB root hub USB device assignments dynamically to distribute pairs of a plurality of USB ports each to one of a plurality of USB root hubs based on a USB device bandwidth balancing process to maximize USB device bandwidth."

Sauber discloses a system for dynamically switching buses and ports for a computer. Sauber discloses that a bottleneck problem would not occur if a user placed two higher bandwidth devices on ports connected to separate USB controllers. (Sauber, column 2, lines 18-24). Sauber, however, does not disclose, teach or suggest pairing USB ports and switching the paired ports to a single USB root hub. That is, Sauber does not teach, discuss or suggest "said USB host controller having a plurality of root hubs wherein the plurality of switches are dynamically switched to route pairs of a plurality of USB ports to one of said plurality of root hubs based on a USB device bandwidth balancing process to maximize USB device bandwidth," "the USB bandwidth load balancing circuit dynamically distributes pairs of a plurality of USB ports each to one of said plurality of root hubs based on a USB device bandwidth balancing process to maximize USB device bandwidth," "switching a plurality of USB root hub USB device

assignments dynamically to distribute pairs of a plurality of USB ports each to one of a plurality of USB root hubs based on a USB device bandwidth balancing process to maximize USB device bandwidth,” or “switching a plurality of USB root hub USB device assignments dynamically to distribute pairs of a plurality of USB ports each to one of a plurality of USB root hubs based on a USB device bandwidth balancing process to maximize USB device bandwidth.”

Therefore, since Sauber does not disclose, teach or suggest all of Applicant’s amended claims 1, 6, 13 and 21 limitations, Applicant respectfully asserts that a *prima facie* rejection under 35 U.S.C. § 102(e) has not been adequately set forth relative to Sauber. Thus, Applicant’s claims 1, 6, 13 and 21 are not anticipated by Sauber. Additionally, the claims the directly or indirectly depend from claims 1, 6, 13 and 21, namely claims 2-5, 6-11, 14-20, and 22-28, respectively, are also not anticipated by Sauber for the same reasons.

Accordingly, withdrawal of the 35 U.S.C. §102(e) rejections for claims 1-28 are respectfully requested.

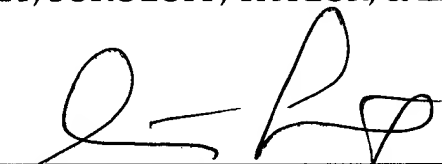
CONCLUSION

In view of the foregoing, it is believed that all claims now pending, namely 1-11 and 13-29, patentably define the subject invention over the prior art of record and are in condition for allowance and such action is earnestly solicited at the earliest possible date.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,
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Dated: June 2, 2004

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Jean Svoboda